

ABSTRACT

An asynchronous and opportunistically available scheme under which a user's e-mail (or a document including e-mail content) is rendered immediately, and later updated with appropriate advertisements if and when they became available, is described. This scheme ensures that the availability of advertisements will not adversely affect the rendering of the e-mail content. For example, a Web-based e-mail server may facilitate the serving of advertisements with e-mail by (a) accepting a request for a document including e-mail, (b) generating a request identifier, (c) serving the requested document in association with the request identifier, and (d) obtaining at least one ad relevant to content of the e-mail. The Web-based e-mail server may further (e) store the obtained ad(s), (f) accept an ad request, (g) read the stored ad(s) using information from the ad request, and (h) serve the ad(s).